

EXHIBIT F

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Richmond Division**

ePLUS, INC.,)	
)	
)	Civil Action No. 3:09-cv-620
Plaintiff,)	
)	
v.)	
)	
LAWSON SOFTWARE, INC.)	
)	
)	
Defendant.)	

**REPORT OF EXPERT MICHAEL I. SHAMOS, PH.D, J.D.
CONCERNING INVALIDITY**

BACKGROUND & QUALIFICATIONS

1. My name is Michael I. Shamos. I hold the title of Distinguished Career Professor in the School of Computer Science at Carnegie Mellon University in Pittsburgh, Pennsylvania. I was a founder and Co-Director of the Institute for eCommerce at Carnegie Mellon and I now direct a graduate degree program in eBusiness Technologies. My résumé is attached as Exhibit 2 to this report.

2. I teach graduate courses at Carnegie Mellon in Electronic Commerce, including eCommerce Technology, Electronic Payment Systems, Electronic Voting and eCommerce Law and Regulation and have done so since 1999. In Fall 2009 I am teaching Law of Computer Technology.

3. From 1979-1987 I was the founder and president of two computer software development companies in Pittsburgh, Pennsylvania, Unilogic, Ltd. and Lexeme Corporation.

4. I am an attorney admitted to practice in Pennsylvania and have been admitted to the Bar of the U.S. Patent and Trademark Office since 1981. I have not been asked to offer any opinions on patent law in this action.

5. I have previously testified in a number of cases concerning computer technology. My résumé in Exhibit 2 contains a list of cases in which I have testified in the last ten years.

6. I have been retained as a technical expert by the law firm of Merchant & Gould LLP on behalf of Lawson Software, Inc. ("Lawson") in this action.

7. I have been engaged through Expert Engagements LLC ("EE"), a firm that locates expert services for law firms. EE charges \$550 per hour for my regular services, of which I receive \$495. EE charges \$750 per hour for time during which I am under oath, of which I receive \$675. I am one of the owners of EE. No part of my compensation is dependent on the outcome of this case.

8. I have been asked by counsel for Lawson to offer an expert opinion on the validity of a total of 13 claims which I understand ePlus has chosen to assert in this case from the patents in suit: claim 1 of Johnson et al. U.S. Patent 6,505,172 (the '172 Patent), claims 1, 2, 6, 9, 21, 22

and 29 of Johnson et al. U.S. Patent 6,055,516 (the '516 Patent), and claims 3, 6, 26, 28 and 29 of Johnson et al. U.S. Patent 6,023,673 (the '673 Patent), which have been asserted against Lawson (collectively, the "Asserted Claims" of the "Patents"). In connection with my analysis, I have reviewed the Patents, their prosecution histories and the documents listed in Exhibit 1, attached hereto.

9. I have utilized the claim constructions set forth in the Court's Memorandum Opinion dated April 30, 2010 in arriving at my opinions.

10. The individuals named as inventors in the Patents are referred to collectively herein as the "Applicants." All the Patents name the same set of inventors.

11. In this report, where I have cited a reference as prior art, either the reference predates the filing date of the Patent or I have been informed by counsel for Defendants that Defendants intend to prove at trial that the reference is prior art as to the Patent. I have assumed that the asserted patents are entitled to priority as of their filing dates. I have not made any independent determination of relative dates of invention or publication.

12. It may be necessary for me to revise or supplement this report based on material subsequently presented, and I reserve the right to do so. I may also present demonstrative evidence at trial, and I reserve the right to do so.

13. It may be necessary for me to revise or supplement this report, or file a supplement or responsive report, based on any responsive report of Plaintiff, and I reserve the right to do so. In particular, if Plaintiff in any of its expert reports presents new evidence or theories on infringement or validity, including secondary considerations of nonobviousness, I reserve the right to file a supplemental report.

14. I further understand that, as of the date this report is to be served, fact and expert discovery are continuing, and on that basis it may be necessary for me to supplement this report.

corresponding to a desired item.” There is teaching of how to generate “at least partial criteria corresponding to a desired item.”

68. Claim 21 of the ’516 Patent also recites “a catalog selection criteria used to select less than said entire collection “ There is no enablement of any “catalog selection criteria” that would be used to restrict the set of catalogs, and it would not be clear to one of skill in the art what such criteria might be.

69. Claim 21 of the ’516 Patent further recites “a determination system that located items are generally equivalent.” Determining whether items are “generally equivalent” is not enabled by the specification, nor is any such determination system enabled.

70. Claim 22 of the ’516 Patent depends from claim 21 and is invalid as depending from a claim that is not enabled.

71. Claim 29 of the ’516 Patent recites “a catalog selection protocol” similar to that of ’516 claim 1 and is not enabled for the same reason.

HYBRID CLAIMS

72. Several of the Asserted Claims are hybrid claims impermissibly mixing apparatus elements and method steps and thus do not fall within any of the classes of patentable subject matter under 35 U.S.C. §101.

73. Claim 1 of the ’516 Patent recites “a catalog selection protocol, said catalog selection protocol relying on said first set of predetermined criteria to select less than said entire collection of catalogs, and including matching a vendor identification code with a subset of said collection of catalogs, wherein said subset of catalogs includes both a vendor catalog from a predetermined vendor and a second catalog from a predetermined third party that is one of a manufacturer and a competing vendor, said predetermined third party selling items corresponding to items in said vendor catalog.” This is an apparatus claim that recites the method steps of “relying on said first set of predetermined criteria to select less than said entire collection of catalogs,” “matching a vendor identification code with a subset of said collection of catalogs” and “said predetermined

third party selling items corresponding to items in said vendor catalog.” Furthermore, a “catalog selection protocol” is not an apparatus element at all under either party’s construction.

74. Claim 2 and 6 of the ’516 Patent depend from claim 1 and are invalid as depending from a non-statutory hybrid claim.

75. Claim 9 of the ’516 Patent is invalid under 35 U.S.C. §101 as not reciting statutory subject matter. The claim is not tied to any particular machine or device. A “collection of catalogs stored in an electronic format” reads on a compact disk, which is not a machine or device. The remaining elements are not tied in any way to the “collection of catalogs.”

76. Claim 21 of the ’516 Patent recites “said searching module being used to generate additional search-module criteria for said data fields of said requisition module.” This is an apparatus claim that recites a method step.

77. Claim 21 of the ’516 Patent also recites “a multiple purchase order generation module, said purchase order generation module creating multiple purchase orders from a single requisition created with said user-generated criteria and said search-module criteria.” This is an apparatus claim that recites the method step of “creating multiple purchase orders.”

78. Claim 21 of the ’516 Patent further recites “said requisition module working in combination with said catalog searching module to determine multiple sources for said item.” This is an apparatus claim that recites the method step of “working in combination ... to determine multiple sources for said item.”

79. Claim 22 of the ’516 Patent depends from claim 21 and therefore also an invalid hybrid claim.

80. Claim 29 of the ’516 Patent recites “a catalog selection protocol, said catalog selection protocol relying on said first set of predetermined criteria to select less than said entire collection of catalogs, and including matching a vendor identification code with a subset of said collection of catalogs, wherein said subset of catalogs includes both a vendor catalog from a predetermined vendor and a second catalog from a predetermined third party.” This is an apparatus claim that recites the method steps of “relying on said first set of predetermined

criteria” and “including matching a vendor identification code with a subset of said collection of catalogs.” Furthermore, a “catalog selection protocol” is not an apparatus element at all under either party’s construction.

INDEFINITENESS OF THE ASSERTED CLAIMS

81. All the Asserted Claims fail to meet the definiteness requirement of 35 U.S.C. §112 and are therefore invalid.

82. Claim 1 of the ’172 Patent recites “a database containing data relating to items associated with at least two vendors maintained so that selected portions of the database may be searched separately.” This limitation is fatally ambiguous. It is not clear whether each item must be associated with at least two vendors or whether it is merely sufficient to have two different items associated with different vendors. The specification of the ’172 Patent provides no material that would assist in disambiguating this claim. A potential infringer would accordingly have no way of determining whether its database would fall within the scope of the claim.

83. Claim 1 of the ’172 Patent recites “means for generating an order list that includes at least one matching item selected by said means for searching.” However “said means for searching” does not perform any selection – it merely searches. Therefore, the “at least one matching item selected by said means for searching” does not refer to any element at all.

84. Claim 1 of the ’516 Patent recites “a first set of pre-determined criteria associated with said collection of catalogs.” However, no time or event is recited before which such a determination of criteria must be made. Therefore, a potential infringer would be unable to establish whether criteria employed by its system were “pre-determined” and might thus fall within the scope of claim 1. There is no basis in the claim (or the specification) for distinguishing “pre-determined criteria” from simply “criteria.”

85. Claim 1 of the ’516 Patent further contains the limitation “wherein said subset of catalogs includes both a vendor catalog from a predetermined vendor and a second catalog from a predetermined third party that is one of a manufacturer and a competing vendor.” The term

criteria, and these are not recited in the claim. It cannot be determined what it means for two items to “match.”

96. Claims 26 and 28 of the '683 Patent recites a first step of “maintaining at least two products catalogs on a database containing data relating to items associated with the respective sources.” The term “the respective sources” has no antecedent basis and is indefinite as discussed above in connection with '683 claim 3.

97. Claims 26 and 28 of the '683 Patent recites the step of “selecting the product catalogs to search.” The phrase “the product catalogs to search” has no antecedent basis and it is not clear whether “the catalogs to search” refers to the “at least two products catalogs on a database” or some subset of them. A potential infringer would accordingly have no way of determining whether its database would fall within the scope of the claim.

98. Claims 26 and 29 of the '683 Patent recites the step of “determining whether a selected matching item is available in inventory.” This phrase is indefinite because is it not clear whose inventory is meant, whether it refers to the user’s own inventory or the inventory of the “respective source.” Furthermore, an item may be in multiple inventories.

99. Each Asserted Claim is indefinite.

ANTICIPATION AND OBVIOUSNESS OF THE ASSERTED CLAIMS

100. In performing my analysis, I reviewed numerous items of prior art, located anticipating references and utilized express suggestions in the prior art to combine technologies, such as the suggestion to use advertising display systems in elevators, as a basis for opining that certain claims are obvious. Further, I applied appropriate legal standards, listed earlier, which include the *John Deere* factors and *KSR* principles concerning obviousness.

101. In particular, I have relied on at least the following items of prior art, which I am informed qualify as prior art at least as set forth below:

Prior Art Reference	Type of Prior Art?
1. Fisher Scientific Requisition and Inventory Management System (“RIMS system”) (described in U.S. Patent 5,712,989 and the RIMS brochure)	Known or used – 102(a) On sale or public use – 102(b)

Prior Art Reference	Type of Prior Art?
a. U.S. Patent 5,712,989 (“Johnson ‘989”)	102(e) patent
b. RIMS brochure	102(b) publication
2. IBM Technical Viewer/2 system (“IBM TV/2 system”) (described in several documents)	Known or used – 102(a) On sale or public use – 102(b)
a. TV/2 General Information brochure	102(b) publication
b. TV/2 brochure	102(b) publication
3. U.S. Patent No. 4,992,940 (“Dworkin ‘940”)	102(b) patent
4. U.S. Patent No. U.S. Patent No. 5,319,542 (“King Jr. ‘542”)	102(a) patent
5. US 5,694,551 (“Doyle ‘551”)	102(e) patent
6. Gateway 2000/MRO Version (described in the Gateway Manual)	102(b) publication
7. J-Con System (described in the J-Con manual)	Known or used – 102(a) On sale or public use – 102(b)
a. J-Con Manual	102(a) publication
8. P.O. Writer Plus system (described in the P.O. Writer Plus Version 10 manual)	Known or used – 102(a) On sale or public use – 102(b)
a. P.O. Writer Plus Version 10 manual	102(b) publication
9. SABRE system (described in the SABRE Practical Guide)	102(b) publication
10. Lawson V. 6 system (described in several documents)	Known or used – 102(a) On sale or public use – 102(b)
a. Lawson Inventory Control v. 6 Manual	102(a) publication
b. Lawson Requisitions V. 6 Manual	102(a) publication
c. Lawson Purchase Order V. 6 Manual	102(a) publication
11. Lawson V. 5 system	Known or used – 102(a) On sale or public use – 102(b)

102. Exhibit 3, which is an integral part of this report, contains a claim chart demonstrating the invalidity of each Asserted Claim. Exhibit 3 is a spreadsheet in which the rows are claim elements and steps and the columns are prior art references. The cell corresponding to an element and a reference contains text if the element is disclosed in the reference or is obvious in light of the reference. The color coding of Exhibit 3 is explained at the top of the spreadsheet.

103. Exhibit 3 also contains matter from Lawson’s interrogatories concerning invalidity, which are included in columns that are distinct from my opinions. I adopt the prior art citations

114. By 1985, Baxter Healthcare was offering computerized systems for ordering, tracking, and managing supplies, both internally and at customer sites, as part of its business of manufacturing and distributing more than 120,000 products for use in hospitals, laboratories, blood and dialysis centers, nursing homes, physicians' offices, and at home. (L0340559). "The Computer is at the heart of our success," said Karl D. Bays, Chairman and Chief Executive Officer of American Hospital Supply Corporation (AHSC) in early 1985, describing the importance of information systems to the company. (L0340561). Around this time AHSC merged with Baxter Healthcare. (L0340563-564).

115. By the late 1980s, customers were demanding a consolidated computerized order entry system that would allow the customer to order and purchase supplies from all vendors because using multiple systems, one for each vendor, "increased the amount of time it takes to place orders." (L0340559). The consultants noted significant customer interest in all-vendor systems, which were considerably more convenient than separate systems with individual formats, passwords, and reports. Hospitals incurred nearly \$2 in logistics costs for every \$1 they spent on supplies. About 5% of the logistics costs were due to ordering itself, and an all-vendor system might reduce this directly by only 10%, but there was also significant value in the consolidated data that could be produced by an all-vendor system. (L0340565).

116. These customer demands prompted the development of the next generation of e-procurement software called ASAP Express. In late 1987, Baxter and three hospitals of the Premier Hospitals Alliance began a pilot test of the ASAP Express computerized order entry system. The new system would allow orders to be placed with all participating vendors in a standard format, from the same terminal, and with a single telephone call. ASAP Express offered a "level playing field" that gave no advantage to any one vendor. (L0340559). Vendor-specific features, such as electronic catalogs, could be added to ASAP Express, and, as a result, vendors offering such features might achieve some advantage over their rivals. (L0340565). "Richard Egen believed that, for Baxter's hospital customers, the ultimate potential of ASAP

Express was “the total automation of hospital logistics, virtually eliminating the clerical aspects of purchasing.” (L0340565).

Lawson’s Prior Art Software

117. “Founded in 1975, Minneapolis-based Lawson Software specializes in enterprise-wide accounting, human resources, distribution, and materials management application software for businesses worldwide. Lawson continually evaluates and implements the latest technologies to increase client's productivity.” (Inventory Control Procedures Manual (Release 6.0) (January 1, 1994) (© 1993) (L0012837-13145) at L0012849).

118. As of the late 1980s, Lawson was offering e-procurement/distribution software. Lawson’s Versions 5.0 and 6.0 procurement software, which was available prior to August 10, 1994, included Order Entry, Requisition, Inventory Control, and Purchase Order modules. (L0012852). Although the discussion below cites to the Version 6.0 documentation, I understand that Version 5.0 worked generally as described below.

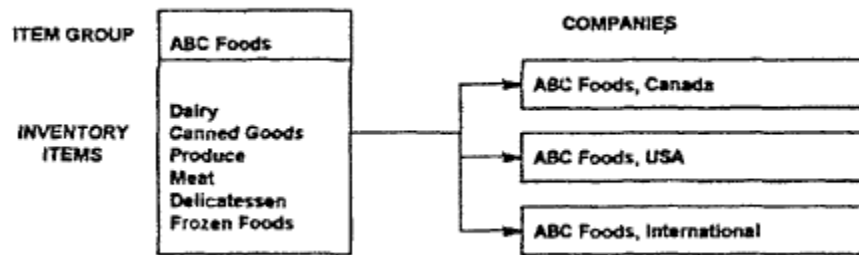
119. “The Lawson Requisitions system is a software package that is integrated with the Lawson Purchase Order and Inventory Control systems. Following are some of the major features and benefits of the Lawson Requisitions system.

- a. You can generate requisitions from the Lawson Inventory Control system. . . .
- b. You can request stock items, non-stock items, special items, and services on a single requisition. . . .
- c. You can quickly create purchase orders from requisitions using a one step process.
- d. You can split requisitions among multiple purchase orders. Buyer review is available before creation of a purchase order, which enables you to combine multiple requisitions for the same line item to one purchase order. (Requisitions Procedures Manual (Release 6.0) (January 1994) (© 1994) at Introduction, v) (L0009725-0009773) at L0009729).

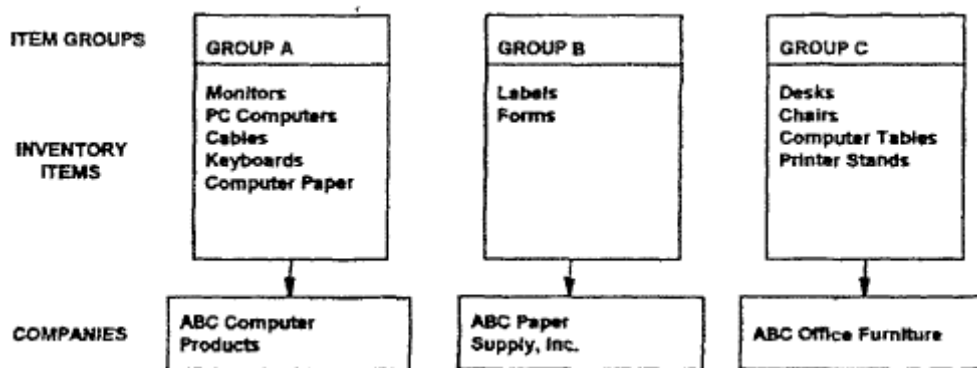
120. The Inventory Control system “maintains and controls inventory for up to 9,999 different companies. At a minimum the Inventory Control system provides the information necessary to support buying and selling operations. Controlling the inventory, knowing exactly what is in stock and where it is, is the first step. The second step is to manage the inventory by having the right amount of inventory available at the right time, reducing your inventory investment, while maintaining the desired customer service level. Lawson's Inventory Control System can have a significant impact on the success of your business.” (L0012843).

121. “The Lawson Purchase Order system is designed to assist Purchasing agents, Accounts Payable and Receiving clerks, and Accounting and Inventory Management personnel in buying inventory and internal supplies while minimizing inventory cost. You also have the ability to match vendor invoices to purchase orders. You can set up the system quickly and easily, especially if you use it with the Lawson Accounts Payable system. Once the invoice is approved and you release the invoice batch, the invoice becomes the responsibility of the Lawson Accounts Payable system.” (Purchase Order Procedures Manual (Release 6.0) (January 1994) (© 1994) (L0013146-0013295 at L0013151).

122. “An item group is a method for sharing items between companies. If the same item numbers representing the same items are to be shared between many companies, those companies should be assigned to the same item group. If the same item number could represent different items for different companies, these companies should be set up in their own unique item groups.” (L0013134). “The Lawson Inventory Control system supports multiple inventory item groups and companies. Item Groups are used to identify inventory items for a company. For example, if a company distributes paper products, they would identify an item group for paper products. You can assign the same item group to multiple companies. In the diagrams shown below, ABC Foods set up one item group that is shared by three companies. Procedures described in this manual assume this setup.



123. If multiple companies exist but do not share the same inventory items, you need to set up unique item groups for each company as shown in the diagram below. (L0012875).



124. The Lawson Version 6 software included a database (“Item Master File”) that allowed customers to upload data regarding items that could be ordered using the Requisition and Purchase Order modules: “The item master file consists of item information that is not location specific such as the item description, generic name, freight class, sales class, inventory class, purchasing class, tax code, units of measure, etc. This *is* where you indicate if an item is tracked for inventory by lot and serial number. To define a non-inventory item, set the Inventory Tracking indicator to (N)o. Run rC211 (Item Master Listing) for a listing of established item master records.” (L0012922).

125. There were standard and custom fields for each item within the item master file: “Use IC11.1 (Item Master) to add items to the item master file. All inventory items must be set up on this screen. This screen requires you to type the Item Group, Item identifier, first Description line and Stock UOM (unit of measure).” (L0012923). Custom fields could be added for items within the Item Master File: “You can use this screen as is or customize the field

names to meet your specific needs. For example, you can set up these fields to represent size, style, color, manufacturer name, version number, release date, etc.” (L0012931).

126. The following is a screen shot displaying an item (Item No. 1013, for cheddar cheese) for Item Group (ABC Foods) in the Item Master File. First they added the item, then edited the field defaults. They performed a (C)hange function to assign a generic name and establish inventory tracking. ABC Foods can inquire on items by generic name in IC30.1 (Item Search). Also, because the item is set up for inventory tracking, ABC Foods will need to set up an item location record for each location that stocks the item. (L0012924).

IC11.1 A Item Master	
Add Change Delete Inquire Next Previous	
Item Group	ABC ABC Foods
Item	1013 CHEDDAR CHEESE
Mimic Item	
Stock UOM	02
Generic Name	DAIRY
Replacement Item	
Date Added	88993
UPC Code	
MSDS Required	N No
Decimals for Cost	3
Price	5
Quantity	
Freight Class	
Sales Class	
Inventory Class	DAIRY
Purchasing Class	
Harmonize Code	
Hazard Code	
Purchase Taxable	
Purchase Tax Code	
Inventory Tracking	Y Yes
Serial Tracking	N No
Stock Weight	1.000
Status	A Active
Tax Category	
Lot Tracking	N No
Stock Cubic250
Certification	N No

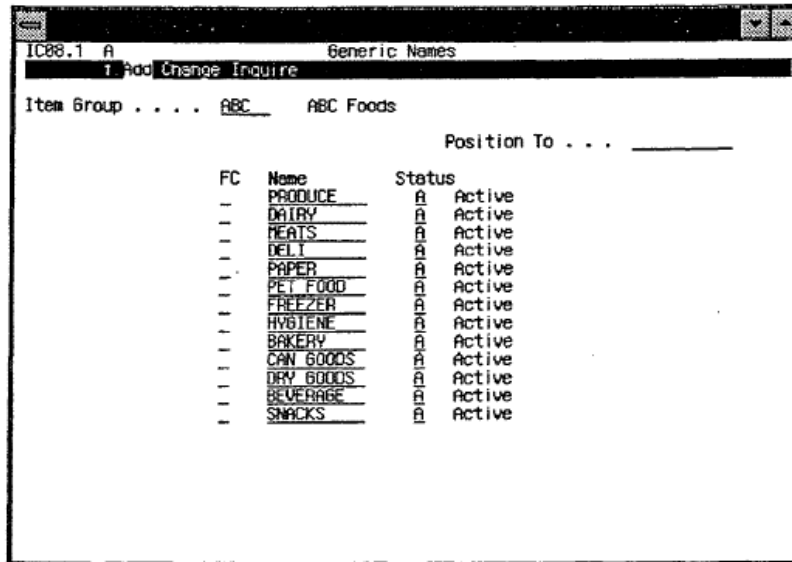
Add Complete - Continue

127. The Lawson Version 6 software allowed customers (e.g. ABC Foods) to define classes for items within item master. “Classes further define items in the item master file for inquiry, processing, and reporting purposes. The set up procedure for each class type is exactly the same. Use all class types to access items in IC30.1 (Item Search). Use inventory classes to select items for reporting purposes and sales classes for pricing and sales analysis. Purchasing classes are used extensively in the Lawson Purchase Order system.” (L0012887). “Inventory Class: A user-defined subdivision of inventory by product grouping viewed from an inventory perspective. A major class and a minor class are available for further subdivision if desired. You can use inventory classes as a selection criteria in the item search inquiry program and in several

report programs including the movement analysis report.” (L0013133). For example, as shown in the screen shot below, ABC Foods could define a major inventory class for fruit and minor inventory classes to classify varieties of fruit (e.g., apples, pears, etc.). (L0012906).

FC	Minor Class	Description	Status
-	APPL	Apple	A Active
-	ORAN	Oranges	A Active
-	BANA	Bananas	A Active
-	WGRP	White Grapes	A Active
-	RGAP	Red Grapes	A Active
-	KIWI	Kiwi	A Active
-	GPFR	Grape Fruit	A Active
-	WATE	Watermelon	A Active
-	CANT	Cantaloupe	A Active
-	STFR	Star Fruit	A Active
-	PEAC	Peach	A Active

128. In addition to defining classes, the Lawson Version 6 software allowed customers to define generic names for items within the Item Master File ”to optionally group similar inventory items together under one name. Generic names appear on selected inventory reports and can be used to access specific items in IC30.1 (Item Search).” (L0012907). For example, as shown in the screen shot below, ABC Foods could set up Generic Names for each department in the store. This way they can access all items in a particular department at once. For example, they can access all bakery goods in IC30.1 (Item Search) using the generic name BAKERY. (L0012908).



129. The Lawson Version 6 Item Master File could include both inventory items and nonstock items, but not special order items: “The system will keep track of the item by the quantity kept at various locations. Essentially, if the inventory tracking flag is set to an "N", an item master record is maintained but no item location records are updated. These items are considered non-stock items.” (L0013134). “A nonstock item has a description, but quantities are not maintained. An item master record is kept, but not an item location record. This nonstock item is set up as Inventory Tracking = "N" on the item master file. A non stock item is differentiated from a special order item. A special order item has no item master or item location record and is used only by the Purchase Order and Order Entry systems.” (L0013135).

130. The Lawson Version 6 Item Master File was capable of including items from multiple different vendors:

- a. “You can use up to three different procedures to replenish inventory from a vendor.” (L0012968).
- b. “The system creates requisitions in the Lawson Requisition system and selects items to be reordered from vendors.” (L0012853).
- c. Mass Updating: “Quickly setup new locations, change the primary vendor for a product line and/or assign a new buyer to a product line.” (L0012854).

- d. Vendor Replenishment: Use this inventory replenishment level to create purchase orders for a specific vendor in the Lawson Purchase Order or Requisitions systems.” (L0012881).
- e. “After you establish an item location record in IC12.1 (Item Location), you are automatically transferred to IC12.2 (Reorder Information). Use this screen to set up purchasing and reorder information for an item. Purchasing information defines the item's primary vendor, the purchase from location, and the type of reorder document to create: (p)urchase order, (T)ransfer, (I)ssue, (R)equisition, (X)intransit or (N)one. Reorder information defines how and when inventory is replenished.” (L0012936).
- f. “You must define vendors in APIO.1 (Vendor) before you can process requisition purchase orders in RQ20 (Buyer Requisition Review and PO Create) or assign a suggested vendor in RQ 10.2 (Requisition Header). The suggested vendor is the vendor from which a buyer should consider ordering. You can change the suggested vendor when creating a purchase order. For information on defining vendors, see the *Accounts Payable Procedures Manual*. (Requisitions Procedures Manual (Release 6.0) (January 1994) (© 1994) at 2).
- g. Vendors are assigned vendor numbers. (L0012969).

131. The Lawson Version 6.0 software provided for identifying an item with both an item number from the Item Master File and the vendor number for the vendor that sourced the item: “Use PO13.1 (Vendor Item) to set up a cross-reference list of vendors for an item so you can look up the item if the vendor's item identification is different. This information is used to order an item from a specific vendor. When you order these items, the vendor information prints on the PO. That way, the vendor knows what item you are ordering based on their item number and description.” (L0013209).

132. The Lawson Version 6.0 software provided for cross-referencing an item number with a customer item number, which was a useful feature if customers asked for items using their own numbering system. (L0012606).

133. As shown above, the Lawson Version 6 software included the ability to search the Item Master File using a number of different queries. For example, searches could be done for items by generic name, by class types, by the first user-defined field (IC30.1 - Item Search). (L0012917, L0012931, and L0012924). Users could search for items by an item code. (L0013226). The item code is a “Key Field” (L0015722) that the system uses to access the data file information. (L0015617). Alternatively, Version 6.0 of the Lawson’s Purchase Order Module enabled a user to search for items by the item number in the Item Master or by the vendor item. (L0016265-67).

134. Version 6.0 of the Lawson's Requisition Module enabled users to create a requisition from a standard order. (L0009741). An order could be created from items retrieved from the database by item number. (L0013226, L0015719-22). Items in the Item Master File (inventory and non-stock items) could be added to requisitions: “The Lawson Requisitions system interfaces with the Lawson Inventory Control system for requisitioning stock and non-stock items. To set up the inventory structure. . . . 1. Use IC00 (Item Group) to define item groups. An item group identifies defaults and parameters for a specific group of inventory items defined in the item master file. 2. Use IC01 (Company) to define your company in the Lawson Inventory Control system. 3. Use IC02 (Location) to define inventory locations. You must define a delivering location in the Inventory system. You do not have to define a requesting location. 4. Use IC11 (Item Master) to define non-stock items. Use IC11 and JC12 (Item Location) to define inventoried items.” (L0009734).

135. **“To print a catalog of items** Run RQ250 (Item Catalog) to print a list of the items and their descriptions for the selected item group and inventory class. This program lists only inventoried and non-stock items defined in IC11 (Item Master).” (L0009753).

136. “How you create a requisition depends on the type of items you request and from where you request them. You can request four types of items: inventoried, non-stock, special orders, and services. . . . **Tips** While creating a requisition, you can select an item and display its stock-on-hand balances and other inventory information.” (L0009740)

137. “How requisitions are processed depends on the line item type and from where you request items, either from inventory stock or directly from a vendor. **Non-stock, special order, and service items.** When requesting non-stock, special order, or service items, the system sets the Create PO field to Yes in RQIO.3 (Requisition Line Detail). The buyer reviews the requested items, assigns vendors, and creates purchase orders. After receiving items, close the requisition lines and, if desired, print delivery tickets. **Inventoried items.** When creating requisitions for inventory items, you can request items from inventory stock or directly from a vendor. When requesting items from a vendor, the Create PO field in RQ 1.0.3 must be Yes.” (L0009735).

138. Version 6.0 of the Lawson's Requisition Module enabled users to create purchase orders from one or more requisitions. (L0009747-49). “To create a purchase order from a requisition for inventoried items, the Create PO field in RQ 1.0.3 (Requisition Line Detail) must be Yes. The system sets this field for non-stock, special order, and service items. There are two ways to create purchase orders from requisitions:

- a. Create a purchase order directly from one requisition. See “Creating a Purchase Order from One Requisition.”
- b. Select items from several requisitions to create a purchase order. See “Selecting Items to Create a Purchase Order.” (L0009747).

139. Purchase orders could be issued to multiple vendors: (L0013161)

Extensive line item
information

includes this information
for line items:

- item number
- vendor item number
- item description
- valid units of measure
- weight
- volume
- comments
- delivery date range
- unit cost defaults or
manual pricing
- ship-to locations by line
item
- certification/inspection
required flags

Defaults general ledger
distributions for inventoried
items and allows entry for
non-inventoried items.

(L0013162).

140. “(Use PO10.1 (Vendor), P013.1 (Vendor Item), and P014.1 (Vendor Item Quote) to setup vendors and vendor items for the Purchase Order company. Use PO10.1 (Vendor) to set up the vendors and purchase from locations for vendors. Use PO13.1 and PO14.1 to set up vendor items and quotes for vendor item. The vendors you set up in these screens must already exist as vendors in the Accounts Payable system.” (L0013204).

141. The Lawson Version 6.0 software tracked inventory of items in the Item Master File:

Inventory Control Features

Listed below are the Lawson Inventory Control system major features, their advantages, and benefits.

Feature	Advantage	Benefit
User Definable Maintenance Screen Formats	The system allows you to create maintenance and inquiry screen formats to meet your specific needs.	Customize your own item set up process to streamline the process of adding and maintaining inventory items.

Multiple Levels of Stock-On-Hand (SOH) Balance Control

The system tracks SOH balances by location, bin, lot, serial number and unit of measure. Item availability is based on supply, demand, and SOH quantities.

Quickly access stock detail information such as: item bins, SOH quantities, lot/sublots, lot holds, inspection/allocated totals and freeze status.

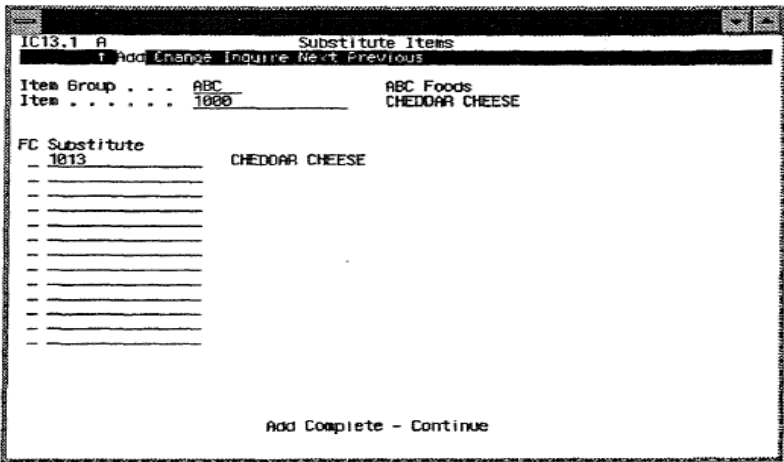
L0012852).

142. The Lawson Version 6.0 software tracked inventory in multiple locations: “Locations define places within a company where you store inventory. They can represent physical places such as cities, buildings, warehouses or they can represent logical classifications such as administration, supplies, finished goods, etc.” (L0012876).

143. The Lawson Version 6.0 software “uses item substitutes when an item does not have sufficient stock to fill an order. When this is the case, the system first looks for a replacement item in the item master file. If one is not set up or does not have sufficient stock, the order entry system looks for substitute items. If any substitute items exist, this screen displays during the ordering process, allowing the user to select a substitute item to fill the order.”

(L0012941). Unlike replacement items, selecting a substitute item was not automatic.

(L0012658). The Item Master File for each item included a field allowing the customer to set up to two substitute items. For example, as shown in the screen shot below of the Item Master File for item 1000, ABC Foods selected a different brand for same product (item 1013, cheddar cheese):



(L0012943).

144. A “Replacement Item” is an alternative item to use in place of another inventory item if the inventory item is out of stock. Like the substitute item, it is a field in the Item Master File. The Lawson 6.0 system automatically “uses the replacement item when the normal item is out of stock.” (L0013137; L0012658). The system would then display a message indicating that the replacement item was used in place of the original item. (L0012658).

Catalog Databases and Search Engines

145. The prior art of catalog databases and database search engines is long and extensive. As of the early 1990s, there were more than six different systems that would allow multiple catalogs to be loaded into a database with searching capabilities for such catalogs. (G000362-375 at G000365-369).

146. The following systems had similar functionality to TV/2, which was used in the preferred embodiment of the patents-in-suit as described above.

147. DynaText provided the same functions as TV/2, except that it would run only in a Windows or UNIX environment. DynaText had very strong searching capabilities, including Boolean, wildcard, proximity, and dynamic searching. (G000366). DynaText could display text, graphics, and videos. (G000365). DynaText included a table of contents, links to documents, and the ability to interface with other applications, like requisition/purchasing systems. (G000365-366).

148. Guide was also a strong competitor to TV/2. It allowed for text searching in a document or group of documents. The search could be run against the whole document or an index of target words for the document. Although Guide was capable of linking to other applications, like RIMS, it was more difficult to transfer information to and from other applications than TV/2. (G000367). Guide could display text, graphics, and videos. (G000365).

149. InnerView provided a database search engine that ran on Windows and allowed several searching options, including Boolean, text, wildcard, and phrase searching. It provided the ability to search only certain fields of a database (as opposed the entire database). It also had

the ability to connect to other applications and exchange data with them. (G000368). InnerView could display text, graphics, and videos. (G000365).

150. Prism was designed to manage all forms of product sales and marketing information. It incorporated any combination of text, graphics, audio, animation, and full motion video into a product information system. (G000369). It could display text, graphics, and videos and was capable of linking to other applications. (G000365).

151. The above recitation of the state of the art as it existed before 1994 demonstrates a history of incrementally advancing procurement and requisition software products in response to increasing customer demands and as new, cheaper functionality became available on or for use with computers, such as increased storage capacity, increased speed, and more user-friendly interfaces.

The RIMS System

152. The '989 Patent as well as a marketing brochure entitled *Fisher RIMS: A Revolutionary Electronic Requisition and Inventory Management System* ("RIMS Brochure"), (L0260595-L260606) describe the Fisher RIMS system, which is a requisition and inventory management system.

153. The patents-in-suit incorporate by reference the disclosure of the '989 patent into their specifications and provide the structure for the requisitioning and purchase order generation for the asserted claims. However, it is my opinion that the Patent Office examiner did not understand that the RIMS system was prior art to the patents-in-suit. The Applicants did not disclose to the Patent Office that the RIMS system was on-sale and in public use more than a year before the filing date of the '683 patent. The Applicants did not disclose the RIMS brochure to the Patent Office. The Applicants did not notify the Patent Office that the '989 Patent had different inventors than the patents-in-suit and the '989 Patent did not become prior art under 35 U.S.C. §102(e) until it issued in January, 1998 (almost four years after the '683 patent was filed). Additionally, the Applicants did not disclose the '989 patent as "prior art" in

details. Potential uses include: Integrating part catalogues with dealers' computer systems such as order entry, inventory management and customer records” (L0132134.)

218. The RIMS system as described in the '989 patent is a part ordering system that allows order entry and inventory management. ('989 patent, 1:5-7 (“This invention generally relates to systems for requisition and inventory management.”); '989 patent, 1:4-17 (Background explaining that the RIMS system is a requisition system, which generally “process purchase orders for items and track inventory.”); 8:25-38 (discussing RIMS Parts Master record, which includes “part number”)).

219. The TV/2 system was designed with an applications program interface (API) for interfacing the TV/2 system with other systems such as parts ordering systems, like RIMS. Thus, there is reason to combine the Fisher RIMS and TV/2 systems.

220. I understand that there will be testimony at trial to the effect that the patented invention resulted from customers asking Fisher Scientific to manage other types of product inventories other than the products that Fisher supplied, and to provide access to other supplier catalogs. This provided an obvious motive for one of ordinary skill in the art to combine the Fisher RIMS system and the TV/2 system, which was capable of searching for products from Fisher and non-Fisher catalogs and transmitting the results of such searches to a system such as the RIMS system. Indeed, Baxter Healthcare had recognized this need and provided this functionality in connection with the ASAP Express electronic sourcing system in mid-1980s.

221. The RIMS system and TV/2 systems were both designed to operate on the IBM OS/2 operating system platform, which further demonstrates that it would have been obvious to one of ordinary skill seeking to have a system with both extended searching capabilities and a requisition/purchasing system to combine the Fisher RIMS system with the TV/2 system. Dynamic data exchange (DDE) was the known, preferred protocol for exchanging information between applications operating on an OS/2 system.

222. The documents show and I understand that there will be testimony at trial to the effect that the process of creating an interface between TV/2 and RIMS applications was for the

of the '516 patent, and asserted claim 1 of the '172 patent as shown in Exhibits 3 and 4). As such, the combination RIMS and the '940 patent renders these claims invalid under 35 U.S.C. §103.

225. One of skill in the art would have been motivated to combine the Fisher RIMS system with the '940 patent. The alleged improvement of RIMS over prior art sourcing systems was its ability to track just-in-time (JIT) inventory. '989 patent, 1:49-50. It therefore teaches combining inventory tracking with prior art sourcing systems.

226. The RIMS system allowed a user to purchase goods offered by plurality of sources (for example, Fisher and Promega as described above and as set forth in detail in Exhibit 3). However, I understand that in trying to distinguish the asserted claims from the RIMS system, ePlus will argue that the RIMS system was actually a “single source system” – that is, it allowed the customer to purchase only from the distributor that ran the RIMS system. While I disagree that RIMS was a “single source system” and dispute that the asserted claims require purchases to be made from different entities as interpreted by ePlus, it is my opinion that even if these were true, there was reason to combine the so-called single source system of RIMS with the '940 patent, which disclosed a system that “assists a user with locating and purchasing goods or services sold by a plurality of vendors.” ('940 patent, Abstract.)

227. By 1988, there were over fifty different automated order-entry/material management systems in the marketplace. (L0343536). As order efficiency decreased and logistical costs increased with multiple, incompatible systems, customers became interested in multi-vendor systems. (L0343536-537; L0340565). A multi-vendor system could reduce logistical costs by 10% and provide the advantages of consolidated data. (L0340565). Consolidating information about multiple vendors removed the need for customers to consult hundreds or thousands of vendor catalogs to find the best price for an item. ('940 patent, 1:14-60.) Baxter Healthcare offered a multiple-vendor electronic sourcing system in the late-1980s, years before the patents-in-suit were filed. Thus, even if the Fisher RIMS system as described in

the '989 patent was single-source and the asserted claims require purchases from multiple sources, market pressure would provide a motivation to combine RIMs with the '940 patent.

228. During prosecution of the '683 and '516 patents, the Patent Office found that the '940 disclosed all of the claim elements except: 1) converting items found in one vendor's catalog to another vendor; and 2) searching only portions of a catalog database. During the prosecution of the '172 patent, the Applicant argued that Dworkin did not teach a single requisition that could include multiple items and be sourced to different vendors. It is my opinion that the RIMS system teaches these missing elements (as described more fully in Exhibits 3 and 4). Additionally, the '940 patent at least implicitly recognized a need to search a subset of the database – it required a user to first select a category of items to search (hardware vs. software). Thus, it would have been obvious to combine the teaching of RIMS that allowed users to search portions of the RIMS database (see exhibit 3). Further, the '940 patent recognized that items might have two product numbers (a number identifying the product in the database and a manufacturer's model number), thus it would have been obvious to combine the '940 patent with the cross-reference table in RIMS to associate these different numbers together. Finally, to the extent that the '940 patent is deemed not to teach a single requisition that could include multiple items and generate multiple purchase orders (I believe it does teach this element as shown in Exhibit 3), it would have been obvious to combine it with RIMS which teaches multiple purchase orders from a single requisition ('989 patent, Fig. 5A).

The Combination of J-CON Plus Dworkin '940 Renders the Asserted Claims Obvious

229. It is my opinion that J-CON anticipates all the Asserted Claims.

230. To the extent that J-CON is not deemed to anticipate any Asserted Claim, it is my opinion that such claim would have been obvious in view of the combination of J-CON with the Dworkin '940 patent. The combination teaches all of the elements of asserted claims 3, 6, 26, 28, and 29 of the '683 patent, asserted claims 1, 2, 6, 9, 21, 22, and 29 of the '516 patent, and asserted claim 1 of the '172 patent as shown in Exhibits 3 and 4). As such, the combination of J-Con and the '940 patent renders these claims invalid under 35 U.S.C. §103.

241. ePlus correctly observes that businesses benefit from efficient procurement. (Rog. 6, pp. 12-13). However, numerous prior art system existed that automated the procurement process, as described earlier in this report. Therefore, even if the claimed inventions also accomplish this goal, that is not evidence of nonobviousness. Quite the opposite. The fact that numerous artisans built, used and patented a variety of automated procurement system is evidence of obviousness because it tends to show contemporaneous invention by others.

242. ePlus asserts, speaking of the prior art, that “since the electronic catalogs were limited to a single vendor's product, comparison shopping among different vendors could not be conducted.” (Rog. 6, p. 13). This statement is incorrect. At least the following prior art systems allowed comparison shopping among multiple vendors: Johnson '989, P.O. Writer, SABRE, Gateway, J-CON, TV/2, King '542, Doyle '551, and Dworkin '940.

243. ePlus asserts that “there was a long-felt, but unmet need for an electronic sourcing system and process that could integrate product information, such as is typically found in vendor catalogs that are provided to customers and requisition and ordering systems that could use the results of searches of product information in vendor catalogs.” (Rog. 6, p. 13). This statement is incorrect. The aforementioned prior art systems provided such integration.

244. ePlus asserts that “there was a need to provide an electronic sourcing system that was capable of conducting searches of product catalogs of multiple vendors and transferring information about items selected from the results of a vendor catalog database search ... to a requisition building module for inclusion of the catalog items as entries in a requisition generated by the system.” (Rog. 6, p. 13). Such a need, to the extent it ever existed, was amply satisfied by prior art systems.

245. ePlus asserts that “Moreover, such an electronic sourcing system would enable the automation of necessary approvals that may be required with respect to a requisition prior to placing an order with a vendor.” (Rog. 6, p. 14). Such a capability, even if needed and even if

satisfied by the alleged inventions, is not claimed in the Asserted Claims. Therefore, the assertion in no way tends to show that the Asserted Claims are nonobvious.

246. ePlus asserts that “ The inventors recognized that the electronic sourcing system could also include databases having vendors' inventory information or other inventory determination means so that, for a particular selected item from a catalog database search, the system could determine its availability in the inventory of a vendor.” (Rog. 6, p 14). Even if the inventors had that realization, so did numerous others before them. Such a capability was provided by at least the following prior art systems: Johnson '989, P.O. Writer, SABRE, Gateway, J-CON, Doyle '551 and Dworkin '940.

247. ePlus asserts that “If a particular vendor was out-of-stock with respect to a selected item, the inventors recognized that the system should be capable of finding another item available from a different vendor in another vendor catalog by means of, for example, a database which identifies cross-referenced items.” (Rog. 6, p. 14). Even if the inventors had that realization, so did numerous others before them. Such a capability was provided by at least the following prior art systems: Johnson '989, SABRE, Gateway, J-CON and Dworkin '940.

248. ePlus asserts that it received various awards and that these are evidence of nonobviousness. (Rog. 6, pp. 14-16). ePlus is unable to establish any nexus between these awards and the inventions of the Asserted Claims. I note that none of the cited awards mentions any of ePlus's patents or inventions. For example, ePlus points to the “Internet and Electronic Commerce Conference (iEC) Award for Best Internet Infrastructure” award Fisher won in March 1997. ePLUS 0134639-40. The award citation refers to the fact that “Procure Net enables vendors to create electronic storefronts to display and sell their products over the Internet. Fisher's electronic mall interfaces directly to participants' legacy systems-order entry, customer service, inventory-to fulfill and complete the purchasing process.” There is no Asserted Claim that refers in any way to an electronic mall or tying an electronic storefront to legacy systems. In fact, the quotation specifically mentions that procurement is not performed by ProcureNet, but

Exhibit 1
Materials Considered

Deposition Transcripts

Eng, Pamela (SAP Case)
Gounaris, Charles (SAP Case), ePLUS0201227-0201309
Johnson, James (Dec. 9, 2009)
Kinross, Robert (Dec. 9, 2009) and exhibits thereto
Momyer, Douglas (Dec. 9, 2009) and exhibits thereto
Weaver, Alfred (SAP Case), pp 2772-2775

Documents (including books and articles)

American Airlines "SABRE" Claim Chart, L0131537-544
American Airlines "SABRE" Claim Chart, L0131545-553
Ariba Procurement Solution, ePLUS0082349-90
Ariba Rides Aberdeen Award, ePLUS0133477-78
Baxter Healthcare Corporation: ASAP Express, Harvard Business School 9-188-080
Bidgoli, The Internet Encyclopedia, article by Robert Goffman on "Electronic Procurement"
CCI's J-CON Claim Chart, L0131512-536
Complex Indirect Procurement: The Final Frontier for Savings, ePLUS0115274-77
Detailed Request for *Ex Parte* Reexamination of U.S. Patent No. 6,055,516
Easylink, Tripsearch, Recheck, Bargainfinder Plus, Satellite Ticket Printers, Remote Coupon Print, Microfiche, L0131856-874
email from Mary Anderson to Amy Crouse, ePLUS0134656-58
ePlus Achieves Two Consecutive Quarters of Top Ranking in Aberdeen's Supply Chain Top Fifty, ePLUS0026955-57
ePlus Named to iSource Business Magazine's Top 100, ePLUS0027032-33
ePlus Named to 2004 Supply & Demand Chain Executive Magazine's Top 100, ePLUS0026860-81
ePlus v. SAP Trial Transcript, ePLUS0200965-1010, ePLUS0201011-1062
Farsani et al., Designing a Catalog Management System – An Ontology Approach
Final Rejection from the '172 Reexam
Fisher Electronic Sourcing Assessment and Proposal, ePLUS0216394-0216418
Fisher Electronic Sourcing Assessment and Proposal, ePLUS0218032-0218056
Fisher Scientific From Laboratory Equipment to E-Commerce, ePLUS0134651-53
Gateway DOS Product Overview, L0128368-395
Gateway Inventory Processes User Manual December 1993, L0128209-128356
Gateway Purchasing Manual December 1993, L0127887-128208
Gateway – The Newsletter for Purchasing Administration, January 1991, L0128357-361
Gateway – The Newsletter for Purchasing Administration, April 1991, L0128362-366
Gateway 2000/MRO Claim Chart, L0131596-667
Gateway 2000/MRO Screen Shots, L0128494-564
Gateway 2000/MRO Version May 1991, L0127602-886
Guided Tour Version 10.0 (P.O. Writer), L0131668-855
IBM Technical Viewer/2, ePLUS0210933-938
IBM Technical Viewer/2, ePLUS0509238-251
IBM Technical Viewer/2, L013122-130
IBM Technical Viewer/2, L013131-134
IBM Technical Viewer/2 General Information Manual, ePLUS0210933-938
IBM Technical Viewer/2 General Information Manual, ePLUS0210933-938, EPFS75-91
IBM Technical Viewer/2, ePLUS0425536-0425549

iEC Award – Best Internet Infrastructure – Fisher Technology Group, ePLUS0134639-40
 Indirect Purchasing – A Competitive Advantage?, ePLUS0240737-39
Inter Partes Reexamination Communication (6,505,172). mailed October 23, 2009
 J-CON Manual Volume 1, L0123413-124584
 J-CON RDB Guide, L0125035-221
 J-CON System User's Manual Volume 3, L0124585-125034
 Lawson Software Accounts Receivable Procedures Manual for Unix Release 6.0, L0011849-12144
 Lawson Software Cost Allocations Procedures Manual Release 6.0, L0011761-848
 Lawson Software General Ledger Conversion Manual Release 6.0, L0011698-760
 Lawson Software Inventory Control Conversion Manual Release 6.0, L0012800-037
 Lawson Software Inventory Control Procedures Manual Release 6.0, L0012837-3145
 Lawson Software Purchase Order Conversion Manual Release 6.0, L0012492-517
 Lawson Software Purchase Order Procedures Manual, L0013146-295
 Lawson Software Purchase Order Release 6.0 User Text, L0015615-6422
 Lawson Software Requisitions Procedures Manual, L0009725-773
 Lawson Software RQ Screens, L0017410-411
 Lawson Software RQ Screens, L0017412-415
 [Lawson Software] Summary of 5.0 and 6.0 Differences, L0017230-236
 Lawson Software Universe CASE and 4GL, L0017891-8119
 Lawson Software Universe for Unix Developer's Workbench Release 2.1, L0017726-890
 Lawson Software Universe for Unix Getting Started Release 2.1, L0013572-711
 Lawson Software Universe Release Notes Release 2.1, L0014416-532
 Office Action, Examiner's Answer for '683 Reexam, dated 02/26/10
 Pilot and Comprehensive Electronic Sourcing Program System, ePLUS0214268-0214289
 Pilot and Comprehensive Electronic Sourcing Program System, ePLUS0221672-0221693
 P.O. Writer Ad Hoc Reporting Version 10.0, L0126396-402
 P.O. Writer Bar Code Interface Version 10.0, L0126403-422
 P.O. Writer Data Interface Utility Version 10.0, L0126423-481
 P.O. Writer EDI Interface User's Guide Version 10.0, L0126482-500
 P.O. Writer Guided Tour Version 10.0, L0126514-6701
 P.O. Writer Inventory Control Version 10.0, L0126147-395
 P.O. Writer Plus, Version 10 Claim Chart, L0131554-595
 P.O. Writer Plus Fax Module, Version 10.0, L0126702-6717
 P.O. Writer Purchase Requisitioning System Administrator's Guide Version 10.0, L0127256-296
 P.O. Writer Purchasing Tenth Edition (April 1993) Software Revision 10.0, L0126501-513
 P.O. Writer Purchasing Tutorial, L0126718-964
 P.O. Writer Receiving, L0127297-504
 P.O. Writer Requisition Interface, L0126965-980
 P.O. Writer Requisitioning Manual Version 10.0, L0127505-601
 P.O. Writer Security Administrator's Guide Version 10.0, L0126981-999
 P.O. Writer Stock Requisitioning and Kitting System Administrator's Guide Version 10.0, L0127000-7019
 P.O. Writer Stock Requisitioning and Kitting System Version 10.0, L0127020-7102
 P.O. Writer Supplier Rating Report, L0127103-7137
 P.O. Writer System Administrator's Guide, L0127138-7227
 P.O. Writer Version Upgrade Kit, L0127228-7255
 Practical Guide to SABRE Reservations and Ticketing, L0125223-723
 Prior Art Search – Electronic purchase order system, Google Answers, <http://answers.google.com/answers/threadview?id=527697>
 Proposal to Fisher, ePLUS0219699-0219717
 Reality Purchase Order Module, EP019996-20239
 Reexamination of U.S. Patent 6,505,172, L0122971-23087, L0123088-3251
 Reexamination of U.S. Patent 6,505,172 (corrected), L0123252-412